



Travis Williams
*Riverkeeper &
Executive Director*

June 23, 2005

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US EPA, Region 10

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1200 Sixth Avenue

Seattle, WA 98101

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Re: Terminal 4 Early Action

Scott Fogarty

Gayle Killam

Dear Mr. Sheldrake:

John Haines

ADVISORY BOARD

Lawrence R. Curtis,
Ph.D

Willamette Riverkeeper has reviewed the major portions of the EECA for T4 and offers the following comments. We have multiple questions about the cleanup of Slip 3, and the creation of a Confined Disposal Facility (CDF) at Slip 1. While we have questions and concerns, we do believe that there is the potential for this action to lead to a better overall cleanup of contaminated sediments from throughout the Portland Harbor area of the Willamette River.

Mike Lindberg

General Thoughts

Paul Lumley

Mary Lou Soscia

Some have expressed concerns about the long-term impact of a CDF in regard to ecological and human health. While some questions need to be answered, it seems to us there will be multiple opportunities for community members to have input on the design and implementation of any such facility, if approved. It seems that there is an opportunity to address issues related to a CDF's long-term relationship to the Willamette River's ecology, and human health.

As with any large and complicated project, we believe that community involvement is critical. We believe that this kind of participation should be continued into the design of any future CDF, and into the Waste Acceptance Criteria that must be developed that will determine the level of contaminated sediment that will be allowed into the facility.

In researching active CDF sites, we have learned that they can indeed work. We've learned from the folks at Citizen's for a Healthy Bay, in Tacoma, a group that works on Commencement Bay, that these sites have worked for them with contaminated sediment that is very similar to what we know resides in Portland Harbor. Further, Citizen's for a Healthy Bay have monitored their sites for years. For example, at their Milwaukee Waterway site, after 13 years of monitoring, there has been absolutely no change at the site whatsoever. They have three such sites in Commencement Bay.

Comments of Willamette Riverkeeper to the US EPA Regarding Portland Harbor Terminal 4 Early Action

For Portland Harbor we must ask the question, "what will lead to the best, cleanest, and most comprehensive cleanup of the Willamette River in this area?" It would seem if we provide a nearby, scientifically sound, ecologically sound option for "some" types of contaminated sediment, that we will enable more PRPs to do the right thing – and get their dirty sediment out of the Willamette River.

If we fail to do this, we may well have a harbor that has dozens of Capped sites. Instead of monitoring one main facility, in the case of a CDF, we may be relegated to monitoring dozens of sites in a dynamic river environment. With dozens of sites, there would be an equal number of PRPs responsible for monitoring their individual sites. This does little to quell worries about long-term risk.

If we limit the cleanup of sites to dredging and landfill disposal, such as Arlington, we may well end up with companies fighting the cost of such cleanup, with the river remaining in a polluted state for decades after, and a slough of litigation occurring.

Willamette Riverkeeper has worked on this project for years, and have been the leading vocal advocate for getting the river cleanup up in a timely and comprehensive manner. We need to ensure that human and ecological health is addressed in this cleanup. If our concerns about the CDFs engineering and waste disposal criteria are addressed, we may well have another viable option that will lead us to cleaning up the Willamette River for the betterment of river wildlife, and people.

We will likely have more questions about the technical aspects of this project, but our initial response to the EECA follows.

General Comments

While the document is clearly laid out, and follows the general guidance for an EECA, there are some claims that are made that don't seem to be clearly substantiated or sufficiently discussed.

The first Removal Action Objective listed on page 2 of the Executive Summary is to "reduce ecological and human health risks associated with sediment contamination with the Removal Action area to acceptable levels." It appears however that:

- Analytical data were compared only to PECs and TECs which are screening values used for ecological risk.
- Sediment samples were divided into surface sediments (0 – 1 foot) and subsurface sediments (> 1 ft). The biologically active zone for benthic organisms is generally considered to be 0 – 0.5 ft. However, all samples were screened against the benthic PEC/TEC criteria (or they appear to have been).
- No screening criteria were used for human health receptors although they were identified in the conceptual site model development. We continue to talk about human health, and yet we don't have a baseline and cannot demonstrate what it is going to be. We are using criteria for ecological risk, yet not for human health.
- No estimate of current risk, residual risk or risk reduction is presented in the document for either ecological or human health receptors although claims are made that "the goal of the Terminal EE/CA Report was to develop conceptual designs for removal actions that reduce risk, and provide a comparative evaluation of the alternatives." This implies that there is some baseline risk or hazard measurement or index.

- While estimated volumes of dredged material are presented in the document, we were unable to find clear information on proposed dredging depths and the rationale used for those decisions.

Specific comments/questions:

- Page 2-3. A soil unit consisting of dark grey, loose to medium dense soil....encountered below the fill in upland explorations and below surficial sediments in in-water explorations was described as a combination of fairly low density and small fines which make the saturated portions of the same potentially prone to liquefaction during strong seismic shaking. If surface sediments are being dredged, and this type of soil unit is uncovered, how does this affect the stability of the CDF and especially the berm? I did not see this issue addressed anywhere in the report.
- Page 2-4 Section 2.2.5. While the RAOs specifically delineate protection of human and ecological receptors, it appears that PECs and TECs are the only screening criteria being used. How will protection of human health be addressed? How will you know if you met that goal?
- Page 2-4 Section 2.2.5. Generally speaking, PECs have been used on a number of DEQ sites. Where there are exceedances of screening level criteria, most of them appear to exceed only the most conservative TEC values. If the LWRG does not develop criteria for sediment before this removal action takes place, what clean-up numbers will you use, how will they be developed, who will review and approve them, and what will you use to ensure that human health is protected?
- Page 4-1 Section 4.2.1. This section states that human health risks will be reduced through the reduction of contact between receptors and COPCs. And that this reduction will reduce local health risks to acceptable levels. What are the levels now, how far are they from acceptable, how much will they be reduced and on what basis is the claim made that it will be acceptable. Looking at the data in Appendix H, there are some areas where higher concentrations, exceeding both PECs and TECs are found only at depth and not in surficial soils, or even soils as deep at 3 – 5 feet.
- Section 7. The Chemical Characteristics subsections of Section 7 describe the contaminated sediments in each of the areas to be remediated. It appears that only the ecological screening values of PECs and TECs are being used and that although there are samples that exceed the very conservative TECs, exceedances of the PECs is limited to only some sections. For instance it appears that in Berth 401, Slip 1 and Wheeler Bay concentrations of contaminants in sediments are between the TEC and the PEC values.
- Page 8-1 The subcriteria listed includes protection of human health. What is the risk to human health, how much will it be reduced?
- Section 8. It is unclear in review this section, how volumes were estimated, the depths for dredging and the criteria for developing the proposed depths.
- Appendix E. It appears that the only screening criteria used are for PECs and TECs. Although the biologically active sediment unit is considered to be 0 – 6 ft, these screening criteria are used at depth. There are few exceedances, mostly of PAHs and metals of both the PECs and TECs. There appears to be no evaluation of the screening

criteria, its appropriateness, and any subsequent use of the information within the document.

- Appendix M, Page M-2. "The condition of the ecological habitat in the Removal Area has not been formally assessed." How then will the effectiveness of any removal action be assessed? A baseline should be established.
- Appendix M Page M-4. Although human receptors are identified in the conceptual site model, I do not see where potential risks to these receptors are qualitatively or quantitatively addressed, except to say that risks will be "significantly reduced".
- The section on CDF recontamination is blank. Why is this?

Comments Specific to the proposed CDF Policy

1. What is the likelihood that the overall Portland Harbor Cleanup will result in increased use of Sediment Caps if there is not a nearby facility that can receive some contaminated sediment? Does it not stand to reason that without a nearby facility, we will end up with a greater degree of capping utilized at the dozens of areas being cleaned up over the next few years?
2. Is it true that most sites with caps covering a contaminated site result in a significant amount of monitoring over a long period?
3. Does it stand to reason that a nearby site that can aid a Superfund Cleanup will aid in getting more PRPs to the table when the Record of Decision is finalized?
4. What are the known failure rates of CDFs of a similar size and likely contaminant concentration to the proposed Slip 1 CDF?
5. What are issues of concern that have developed at individual CDF sites across the United States?
6. Are these being used in the Northwest, and what difficulties have been encountered?
7. Could a CDF that could accept certain levels of contaminated sediment increase the rate of cleanup in Portland Harbor?
8. What sources of clean fill will be utilized to construct the berm?

Willamette Riverkeeper also believes that the Port of Portland, for the privilege of utilizing this site for a CDF, and gaining the use of lands that belong to the Department of State Lands, should:

- 1) Provide a riparian restoration project at the CDF site, and
- 2) Provide a significant restoration site in the lower 10 miles of the Willamette River, or other nearby waterways within the Portland Metro area.

We believe that the proposed restoration projects will help ensure that the CDF not only helps clean up the Portland Harbor, but that the Port of Portland will also continue its tradition of value-added restoration work that is beneficial to the people of the Portland area and beyond. Such projects

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should complement, but not take the place of, any obligations the Port of Portland has under the Natural Resource Damages aspect of the Portland Harbor project.

Please let me know if you have any questions about our comments. We look forward to working with the EPA, DEQ, Port of Portland, and others in the coming weeks to take us closer to a clean and healthy Willamette River.

Sincerely,

A handwritten signature in black ink, appearing to read "Travis Williams". The signature is fluid and cursive, with a long horizontal line extending from the start of the name.

Travis Williams

Riverkeeper & Executive Director

Willamette Riverkeeper